

What is Claimed is:

1. A tubular food casing comprising a tubular cellulose film precipitated from a viscose solution having a viscosity of from about 55 to about 90 ball seconds, where the ball has a density of 8g/cc and a radius of 0.316 centimeters at a drop of 20 centimeters, and where the solution contains at least eight and one-half weight percent of cellulose, said cellulose having a DPv of from about 300 to about 525, said cellulose film having a dry film thickness of from about 0.015 mm to about 0.040 mm, a dry burst pressure in excess of 40 cm Hg, per 0.01 mm of dry film thickness, and a rewet burst pressure in excess of 5 cm Hg per 0.01 mm of rewet film thickness.
2. The food casing of claim 1 wherein the cellulose has a DPv of about 400 to about 475.
3. The food casing of claim 1 wherein the viscose is a xanthate viscose containing a caustic concentration of from about 4.5 to about 6.5 weight percent and a viscose total sulfur concentration of from about 1.8 to about 2.5 weight percent and the cellulose is precipitated by passing extruded viscose through a bath comprising a strong acid and a salt.
4. The food casing of claim 1 wherein the viscose is a solution comprising non-derivatized cellulose in a solvent comprising tertiary amine oxide and water obtained by forming a dilute solution of about 300 to about 525 DPv cellulose and removing water by vaporization and the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove tertiary amine oxide.
5. The food casing of claim 4 wherein the water is removed in a partial vacuum.

6. The food casing of claim 1 wherein the viscose comprises a non-derivatized cellulose in a solvent comprising water and sodium hydroxide obtained by forming a dilute solution of about 300 to about 525 DPv cellulose and removing the water by vaporization where the cellulose is obtained by treating higher DPv cellulose with acid to reduce the DPv.
7. The food casing of claim 6 wherein the water is removed in a partial vacuum.
8. The food casing of claim 6 wherein the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove sodium hydroxide.
9. A method for making the tubular food casing of claim 1 which comprises:
 - a) preparing a viscose solution, containing at least eight and one-half weight percent of cellulose having a DPv of about 300 to about 525, and having a solution viscosity of from about 55 to about 90 ball seconds, where the ball has a density of 8 grams per cubic centimeter and a radius of 0.316 cm, at a drop of 20 centimeters;
 - b) extruding the solution into the shape of a tube; and
 - c) precipitating cellulose from the extruded solution to form a tubular film having a dry film thickness of from about 0.015 mm to about 0.040 mm, a dry burst pressure in excess of 40 cm Hg, per 0.01 mm of dry film thickness, and a rewet burst pressure in excess of 5 cm Hg per 0.01 mm of rewet film thickness.
10. The method of claim 9 wherein the cellulose has a DPv of about 425 to less than 500.
11. The method of claim 9 wherein the viscose is a xanthate viscose containing a caustic concentration of from about 4.5 to about 6.5 weight percent and a viscose total

sulfur concentration of from about 1.8 to about 2.5 weight percent and the cellulose is precipitated by passing extruded viscose through an aqueous bath comprising acid and a salt.

12. The method of claim 9 wherein the viscose is a solution comprising non-derivatized cellulose in a solvent comprising tertiary amine oxide and water obtained by forming a dilute solution of about 300 to about 525 DPv cellulose and removing water by vaporization and the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove tertiary amine oxide.

13. The method of claim 12 wherein the water is removed in a partial vacuum.

14. The method of claim 9 wherein the viscose comprises a non-derivatized cellulose in a solvent comprising water and sodium hydroxide obtained by forming a dilute solution of about 300 to about 525 DPv cellulose and removing the water by vaporization.

15. The method of claim 14 wherein the water is removed in a partial vacuum.

16. The method of claim 15 wherein the cellulose is precipitated by passing extruded viscose through a wash bath comprising water to remove sodium hydroxide.

17. A method for the preparation of a regenerated cellulose food casing comprising the steps of:

a) dissolving cellulose having a dP of less than 400 in a solvent at a concentration of greater than 8.5 percent by weight to obtain a viscose having a viscosity of less than about 90 ball seconds at a ball density of 8 grams per cc, a ball radius of 0.316 cm and a ball drop of 20 centimeters;

b) extruding the viscose to form a tubular gel film containing sufficient cellulose to form a dry film having a film thickness of less than 0.05 mm;

c) removing solvent from the tubular gel film; and

d) drying the resulting film to form a tubular cellulose film food casing.

18. The method of claim 17 where the viscose is a solution of cellulose xanthate formed using a solution of sodium hydroxide and carbon disulfide to dissolve cellulose and the solvent is removed by washing in an acid solution of a water soluble sulfate salt to regenerate the cellulose.

19. The method of claim 17 wherein the viscose is an alkali solution of cellulose formed from a higher DPv cellulose by steam.

20. The method of claim 17 wherein the viscose is an alkali solution of cellulose formed from a higher DPv cellulose by treatment with acid.